IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

1. (Currently Amended) A method to inhibit allergen-induced airway hyperresponsiveness in a mammal, comprising administering to a mammal a ~~CGRP agent selected from the group consisting of:~~ calcitonin gene related peptide (CGRP)~~; a fragment of CGRP that is an agonist of CGRP, wherein the fragment binds to and activates a CGRP receptor; and a homologue of CGRP that is an agonist of CGRP, wherein the homologue binds to and activates a CGRP receptor~~;

wherein said mammal has~~, or is at risk of developing,~~ allergen-induced airway hyperresponsiveness, and wherein administration of said ~~agent~~ CGRP inhibits allergen-induced airway hyperresponsiveness in said mammal as compared to in the absence of administration of said ~~agent~~ CGRP.

2. (Cancelled)

3. (Currently Amended) The method of Claim 1, wherein said mammal has been sensitized to an allergen and has been exposed to, or is at risk of being exposed to, an amount of said allergen that is sufficient to induce airway hyperresponsiveness (AHR) in said mammal in the absence of said ~~agent~~ CGRP.

4. (Currently Amended) The method of Claim 1, wherein said method further comprises monitoring said mammal to detect whether AHR in said mammal is inhibited, wherein if AHR is detected in said mammal, additional amounts of said ~~agent~~ CGRP are administered until AHR is not detected in said mammal.

5. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered within a time period of between 48 hours or less prior to exposure to an AHR provoking stimulus that is sufficient to induce AHR, and within 48 hours or less after the detection of the first symptoms of AHR.

6. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered upon the detection of the first symptoms of AHR.

7. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered within 1 hour after the detection of the first symptoms of AHR.

8. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered within 12 hours or less prior to exposure to a AHR provoking stimulus that is sufficient to induce AHR.

9. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered within 2 hours or less prior to exposure to ~~a~~ an AHR provoking stimulus that is sufficient to induce AHR.

10. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered to said mammal every one to two days.

11. (Cancelled)

12. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered at a dose of from about 0.1μg x kilogram^{-1} and about 20 μg x kilogram^{-1} body weight of said mammal.

13. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered at a dose of from about 0.1 μg x kilogram^{-1} and about 10 μg x kilogram^{-1} body weight of said mammal.

14. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered at a dose of from about 0.1 μg x kilogram^{-1} and about 5 μg x kilogram^{-1} body weight of said mammal.

15-19. (Cancelled)

20. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is targeted to cells in the lung of said mammal selected from the group consisting of smooth muscle cells and epithelial cells.

21. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered by direct delivery of said ~~agent~~ CGRP to the lung of said mammal.

22. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered by aerosol delivery.

23. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered by parenteral delivery.

24. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered by oral delivery.

25. (Currently Amended) The method of Claim 1, wherein administration of said ~~agent~~ CGRP reduces the airway hyperresponsiveness of said mammal such that the FEV_1 value of said mammal is improved by at least about 5%.

26. (Currently Amended) The method of Claim 1, wherein administration of said ~~agent~~ CGRP prevents airway hyperresponsiveness in said mammal when administered prior to exposure of said mammal to ~~a~~ an AHR provoking stimulus that is sufficient to induce AHR.

27. (Cancelled)

28. (Cancelled)

29. (Currently Amended) The method of Claim 1, wherein said ~~agent~~ CGRP is administered in a pharmaceutically acceptable excipient.

30. (Original) The method of Claim 1, wherein said mammal is a human.

31-42. (Cancelled)

43. (Currently Amended) The method of Claim 1, wherein administration of said ~~agent~~ CGRP inhibits allergen-induced airway hyperresponsiveness in said mammal with statistical significance ($p<0.05$) as compared to in the absence of administration of said ~~agent~~ CGRP.

44. (Currently Amended) The method of Claim 1, wherein the ~~agent~~ CGRP is human αCGRP.

45. (Cancelled)

46. (Currently Amended) A method to inhibit allergen-induced airway hyperresponsiveness in a mammal, comprising administering to a mammal a ~~CGRP agent~~

~~selected from the group consisting of:~~ calcitonin gene related peptide (CGRP)~~; a fragment of CGRP that is a CGRP agonist, wherein the fragment binds to and activates a CGRP receptor; and a homologue of CGRP that is a CGRP agonist, wherein the homologue binds to and activates a CGRP receptor~~;

wherein said mammal has~~, or is at risk of developing,~~ allergen-induced airway hyperresponsiveness in response to a concentration of ~~a provoking agent~~ methacholine that causes a 20% fall in FEV_1 ($PC_{20}FEV_1$), wherein said concentration is less than the concentration required to cause a 20% fall in FEV_1 ($PC_{20}FEV_1$) in non-allergen-sensitized mammals; and

wherein administration of said CGRP ~~agent~~ inhibits allergen-induced airway hyperresponsiveness induced by said concentration of ~~provoking agent~~ methacholine in said mammal as compared to in the absence of administration of said CGRP ~~agent~~.

47. (Cancelled)